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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,996	02/07/2001	Konstantinos I. Papathomas	END920000065US1	8725

7590

03/13/2006

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EXAMINER

SELLERS, ROBERT E

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	Application No. 09/778,996	Applicant(s) PAPATHOMAS, KONSTANTINOS I.	
	Examiner Robert Sellers	Art Unit 1712	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 28 February 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See the attachment. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: None.  
Claim(s) objected to: None.  
Claim(s) rejected: 1, 14, 18, 41, 43, 44, 46, 51-54, 58-62, 75-77 and 82-98.  
Claim(s) withdrawn from consideration: 47, 56, 57, 80 and 81.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_  
13. ☒ Other: Notice of References Cited and Interview Summary forms.

Robert Sellers  
Primary Examiner  
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1. The amendment after Final rejection filed February 28, 2006 has been denied entry. The insertion of the limitations of claim 54 alluding to a blend of a first flexibilizer and a thermoplastic into independent claim 1, and that of claim 78 into independent claim 41 repeats the higher fracture toughness and lower viscosity than the composition without the flexibilizing agent already defined. The higher fracture toughness, lower viscosity and than the composition without the flexibilizing agent denoted in claims 51 and increased thermal shock resistance denoted in claims 51-53 and 75-77 is redundant due to the presence of such features in claims 1 and 41, respectively.
2. There is no antecedent basis for the "resin" separated from the thermoplastic in claims 1 and 41 since it has been previously defined as a "resin material."
3. The blend of a flexibilizer and thermoplastic is described on page 20, lines 10-12. However, the claimed minimum proportion range of 2 percent of the composition is not supported by page 16, line 1 disclosing about 1.0% by weight.
4. More favorable consideration would be given with respect to the 35 U.S.C. 102(e) rejection over Shiobara et al. Patent No. 6,376,100 and the 35 U.S.C. 103(a) over Christie et al. Patent No. 5,668,059 and Johansson et al. Patent No. 6,090,474 in view of Shiobara et al. '100 if the following changes to the claims are implemented:

Claim 1, replace lines 3-4 with "from about 1.0% by weight to about 5% by weight of the composition of a flexibilizing agent comprising a flexibilizer containing functional groups capable of reaction with the epoxy or cyanate ester resin during thermally induced curing, and a thermoplastic other than the flexibilizer, wherein the thermoplastic is separated from the cured epoxy or cyanate ester resin." (There is no support for the claimed first flexibilizer having "groups that connect crosslink sites in a network of the composition in the last line of claims 1 and 41. The terminology hereinabove is substantiated by page 17, lines 26-28 of the specification.)

The limitation recited hereinabove should be incorporated into claim 41, line 7 in the paragraph referring to the flexibilizing agent.

Claims 51-53 and 75-77 should be cancelled.

Further searches for the non-elected species of resin material, flexibilizer, thermoplastic and filler material uncovered the following particularly relevant reference:

5. Shiobara et al. Patent No. 5,225,484 (col. 1, lines 31-34) sets forth a semiconductor encapsulant (col. 8, line 46) comprising an epoxy resin, curing agent, from about 1 to about 15 parts by weight per 100 parts by weight of the epoxy resin (col. 4, lines 30-36, from about 1 to 13% by weight) of a thermoplastic resin impregnated with an organic silicon compound, and from about 0.5 to about 10% by weight of the composition of a silicon-based flexibilizer (col. 8, lines 15-30).
6. The filing of a RCE including the amendment to the claims suggested hereinabove was discussed to address Shiobara et al. '484.

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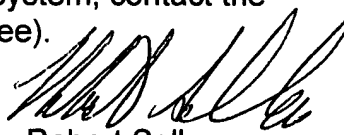
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Japanese Patent No. 7-268278 sets forth a coating film for bonding wires containing an epoxy resin, from 2-20% by weight of a flexibilizer (translation, page 5, paragraph 33) and from 2-40% by weight of a thermoplastic resin (page 4, paragraph 31). The claimed spherical or spheroidal particles are not recited, nor is there any motivation to employ them in a coating film specifically used for bonding wires.

8. Japanese Patent Nos. 9-40747, 9-59349 and 2000-248158 are directed to epoxy resin formulations with a flexibilizer, thermoplastic resin and inorganic filler without the claimed low amount of flexibilizer of from the unsupported minimum of 2% by weight (about 1.0% by weight is set forth on page 16, line 1) to about 5% by weight.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



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3/8/2006